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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims 1-23 indicated as cancelled:

Claims 1-23 cancelled

24. (new) A method of imaging diagnostic information on the GI tract, the method comprising:

administering to a patient a composition comprising a fluorescent dye; flashing illumination within the GI tract, thereby providing a light period and a dark period;

- obtaining a fluorescent image of the GI tract tissue during the dark period; and transmitting image data.
- 25 (new) The method of claim 24 comprising obtaining, on an image sensor within an ingestible capsule, a real image of the tissue during the light period.
- 26. (new) The method of claim 25 comprising obtaining the fluorescent image and the real image on the same image sensor.
- 27 (new) The method of claim 24 wherein flashing comprises alternately illuminating with white light...
- 28 (new) The method of claim 24 wherein transmitting is wireless
- 29. (new) The method of claim 24 comprising focusing light remitted from the GI tract tissue onto an image sensor within an ingestible capsule.
- 30 (new) The method of claim 24 wherein flashing comprises alternately illuminating with monochromatic light and white light.
- 31. (new) The method of claim 25 comprising processing the real image and the fluorescent image to obtain diagnostic information.
- 32 (new) A system for imaging a GI tract, the system comprising an ingestible imaging device, the device comprising:
 - a polychromatic illumination source;
 - a monochromatic illumination source;

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an image sensor to receive a real image and a fluorescent image; and a transmitter to transmit image data to an external receiving unit

- 33. (new) The system of claim 32 comprising an optical system to focus light remitted from the GI tract onto the image sensor
- 34 (new) The system of claim 32 comprising a receiving unit for receiving and processing the image data.
- 35 (new) A method comprising:

staining cells of an endo - luminal wall;

illuminating said cells with an in vivo illumination device from within a lumen;

capturing light remitted from said cells.

- 36. (new) The method as in claim 35, wherein said illumination comprises a polychromatic illumination and a monochromatic illumination.
- 37. (new) The method as in claim 35, wherein said capturing comprises capturing a real image and a fluorescent image.